

Water Pollution Control

Los Alamos National Laboratory
Laboratory Implementation Requirements LIR 404-50-01.1
Issue Date: March 2, 2000 (Revised 06/24/02)

Mandatory Document

1.0 INTRODUCTION

1.01 Lessons Learned [Click here](#) for Lessons Learned that may apply to the requirements contained in this Laboratory Implementation Requirement (LIR).

1.1 Overview

This document establishes Laboratory requirements for assessing new and/or modified activities to determine the environmental issues and regulatory requirements associated with the protection of water quality for both surface water and groundwater. Prior to starting work, the line manager with responsibility for safety, including control-of-environmental impacts, and the facility manager shall identify and provide controls for the hazards to water quality for the areas where they have responsibility. The assessment of hazards shall include the identification of environmental issues and regulatory requirements related to federal and state water quality laws, regulations, and permits. This document replaces AR 9-6 (Water Pollution Control), and the following paragraphs on page 2 of AR 9-4 (Accidental Oil, Chemical, and Airborne Releases): Standard Operating Procedures; Spill Coordinator; and Preventive Measures. The requirements of this LIR shall be effective upon the issue date.

1.2 In This Document

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2.0 PURPOSE

These requirements are established in support of Laboratory Performance Requirement (LPR) 404-00-00, Appendix 5, "Performance Requirements: Surface and Groundwater." These requirements shall be implemented through the review of all new and modified activities and projects to ensure that the work is performed in compliance with applicable federal and state laws, permits, and regulations that provide for the protection of water quality for surface water and groundwater.

3.0 SCOPE/APPLICABILITY

This LIR shall be applicable to all Laboratory and subcontractor activities that generate or plan to generate wastewater effluent or that impact or have the potential to impact the quality or quantity of groundwater or surface water, including storm water runoff. Wastewater disposal is addressed in LIR 404-00-02, "General Waste Management Requirements."

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4.0 DEFINITIONS

Note: These definitions are provided for the purpose of this LIR and are consistent with regulatory definitions. They are provided for reader clarification and may differ from more technical definitions found in statutes, regulations, and other legal materials. (See References)

Environment—Any surface water, watercourse, groundwater, drinking water supply, land surface or subsurface strata, or ambient air.

Groundwater—Interstitial water that occurs in saturated earth materials and that is capable of entering a well in sufficient amounts to be utilized as a water supply.

National Pollutant Discharge Elimination System (NPDES)—The national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits to discharge wastewater or storm water, and imposing and enforcing pretreatment requirements under the Clean Water Act.

Oil—Oil of any kind or in any form, including crude oil, oil sludge, oil refuse, oil mixed with other wastes, and nonpetroleum oils, such as vegetable and animal oils.

Outfall—The outlet of any discernible, confined, and discrete conveyance, including but not limited to any pipe, channel, or conduit that may discharge pollutants in water to the environment.

Owner/operator—The owner or operator of any facility or activity subject to regulation under federal or state water quality regulations.

Permit—A written permission from a regulatory agency (i.e., Environmental Protection Agency, New Mexico Environment Department, or Army Corps of Engineers) required as authorization to discharge wastewater or storm water; to operate, construct, or modify a wastewater treatment system; or to conduct work in a watercourse, etc.

Pollutant—Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

Release—Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

Storm water—Storm water runoff, snow melt runoff, surface runoff, and drainage.

Storm Water Pollution Prevention Plan (SWPPP)—A description of the potential pollutants and the controls for these pollutants for a given facility or activity as required under the NPDES Storm Water General Permit.

Storm Water Discharges Associated with Industrial Activity—is a guideline that determines which industrial facilities are potentially subject to the NPDES storm-water-permitting requirements and that uses the descriptions found either in the SIC (Standard Industrial Classification) codes or narrative descriptions to characterize the activities.

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Surface water—All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.) and all springs, wells, or other collectors directly influenced by surface water.

Water contaminant—Any discharged or spilled substance that could alter the physical, chemical, biological, or radiological qualities of water. "Water contaminant" does not mean source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954.

Water pollution—The act or process of introducing or permitting, either directly or indirectly, one or more contaminants into surface water, groundwater, or a watercourse.

Watercourse—Any river, creek, arroyo, canyon, draw, or wash, or any other channel having definite banks and beds with visible evidence of the occasional flow of water.

5.0 ACRONYMS

AHA	Activity Hazard Analysis
AST	Aboveground Storage Tank
BMP	Best Management Practice
CFR	Code of Federal Regulations
D&D	Decontamination and Decommissioning
EM&R	Emergency Management and Response Team
EPA	Environmental Protection Agency
ESH-ID	Environment, Safety and Health Identification process
ESH-18	Water Quality and Hydrology Group
HCP	Hazard Control Plan
HE	High explosive
HEWTF	High-Explosive Wastewater Treatment Facility
HSWA	Hazardous Solid Waste Amendments
ISM	Integrated Safety Management
LIG	Laboratory Implementation Guidance
LIR	Laboratory Implementation Requirement
LPR	Laboratory Performance Requirement
NMED	New Mexico Environment Department
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OIC	Office of Institutional Coordination
RCRA	Resource Conservation and Recovery Act
RLWTF	Radioactive Liquid Waste Treatment Facility
SIC	Standard Industrial Classification code
SPCC	Spill Prevention Control and Countermeasure
SWPPP	Storm Water Pollution Prevention Plan
SWS	Sanitary Wastewater System
WAC	Waste Acceptance Criteria
WPF	Waste Profile Form

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6.0 IMPLEMENTATION REQUIREMENTS

The requirements for implementing the surface- and groundwater-quality review requirements shall be as follows.

Who	Shall
Safety and environmental responsible line manager, Supervisors and Facility Manager	<p>Ensure that a screening of surface water- and groundwater-quality requirements, as described in this document, is integrated as part of the ISM hazard control system. All new and/or modified activities that have the potential to impact surface and/or groundwater quality must be screened for hazards as described in LIR 300-00-01, "Safe Work Practices," LIR 230-03-01, "Facility Management Work Control," and/or LIR 402-10-01, "Hazard Analysis and Control for Facility Work," and LIR 250-02-02, "Facility-Tenant Agreements," which emphasize the need for tenants to evaluate and control their property and work activities to prevent impacts to co-tenants.</p> <p>Ensure that any requirements identified during this screening are addressed in a Hazard Control Plan (HCP) and/or Activity Hazard Analysis (AHA).</p> <p>Designate outfall owners, SWPPP owners, and owners of water quality permits and pollution prevention plans for facilities or activities for which they have responsibility.</p>
Workers and Work Providers	<p>Carry out responsibilities as specified in LIR 300-00-01, "Safe Work Practices," LIR 230-03-01, "Facility Management Work Control," or LIR 402-10-01 "Hazard Analysis and Control for Facility Work," and LIR 250-02-02, "Facility-Tenant Agreements," to complete a Hazard Control Plan (HCP) and/or Activity Hazard Analysis (AHA) and to implement the controls to protect surface and groundwater quality.</p>

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Who	Shall
ESH-18	<p>Assist line managers with safety and environmental responsibilities, facility managers, supervisors, owners, work providers, and workers in identifying and addressing surface water- and groundwater-quality requirements.</p> <p>Provide institutional interpretation of water quality laws and regulations, and develop institutional standards and policies with facility management and operating groups.</p> <p>Provide institutional coordination, interpretation, and communication of all water-quality-related permits, compliance data, and documentation.</p> <p>Provide technical and regulatory support to facility management and operating groups to achieve compliance.</p> <p>Serve as the Laboratory's institutional point-of-contact on surface water- and groundwater-quality issues with regulators, stakeholders and the public, on notification and reporting requirements.</p> <p>Monitor wastewater, surface water, groundwater, and sediment, and perform related activities to determine compliance and the effectiveness of water pollution controls and water-quality-management activities at the Laboratory.</p> <p>Maintain and report water quality related data for the Laboratory.</p> <p>Provide institutional assurance that the Laboratory is operating in compliance with applicable water quality laws and regulations.</p>

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6.1 Surface Water- and Groundwater-Quality Screening

A surface water- and groundwater-quality screening shall be an integral element of the Integrated Safety Management (ISM) hazard control process for all new and/or modified activities or projects and shall be a part of the process by which work is authorized.

The information provided below will help determine whether any surface water- and groundwater-quality-regulatory requirements exist for an activity or project. The associated attachments should be used to clarify or further identify potential surface water- and groundwater-quality-regulatory issues.

If regulatory issues *do* exist, ESH-18 must be involved for a regulatory determination through consultation, the ESH-ID process, and/or the Excavation/Soil Disturbance Permit process.

If surface water- and groundwater-quality-regulatory issues *do not* exist, the new and/or modified activity or project may proceed without further surface water- and groundwater-quality review.

A surface water- and groundwater-quality-regulatory issue potentially exists for the following activities:

- the generation and discharge or disposal of water and wastewater (Attachment 1)
- a process change or rerouting of a wastewater stream (Attachment 2)
- a process or treatment change at a wastewater treatment facility (Attachment 2)
- the connection/disconnection or modification to the wastewater collection systems, including internal building piping (Attachment 2)
- the installation or modification of a septic tank or holding tank system (Attachment 3)
- the installation of a new aboveground or vaulted oil storage tank (Attachment 4)
- a storm water discharge or storm runoff from a facility or activity (Attachment 5)
- any activity that would affect the quantity, quality, direction, destination, or the current manner in which storm water runs off a site (Attachment 5)
- the construction and/or demolition or decommissioning of a facility or structure (Attachment 6)
- the excavation and/or disturbance of soil or the filling of an area, including a watercourse (Attachment 6)

7.0 DOCUMENTATION

7.1 Surface and Groundwater Quality Review Records

ESH-18 shall maintain records of the following: (1) new and/or modified activities and projects that have been referred to ESH-18 for a regulatory determination, (2) permits and permit applications, (3) correspondence with and notification of regulatory agencies, (4) reviews of pollution prevention plans, (5) spill reports and corrective action plans, and (6) other regulatory documents. All records, including any referenced documents, shall be maintained in accordance with permit requirements or for a minimum of five years.

7.2 Safety and Environmental Responsible Line Manager, Facility Manager, Supervisors, Work Providers, and Workers

Safety and Environmental Responsible Line Manager, Facility Manager, Supervisors, and Work Providers must have documentation on the resolution of any requirements associated with the surface water- and groundwater-quality review for the activity to be performed. Those designated as outfall owners, SWPPP owners, and water-quality permit owners must meet all permit- and plan-specific record-keeping requirements.

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8.0 REFERENCES

8.1 Document Ownership

The Office of Institutional Coordination (OIC) for this document shall be ESH-18, the Water Quality and Hydrology Group (505-665-0453).

8.2 Documents

LAUR-98-2837	Integrated Safety Management
LIR 220-01-01	Construction Project Management
LIG 300-00-01	Safe Work Practices Implementation Guidance
LIR 230-03-01	Facility Management Work Control
LIR 250-02-02	Facility-Tenant Agreements
LIR 300-00-01	Safe Work Practices
LIR 402-10-01	Hazard Analysis and Control for Facility Work
LIR 404-10-0	ES&H Management of Contractor-Performed Facility Construction/Maintenance, Environmental Restoration/Decontamination and Decommissioning, and Related Drilling Operations
LIR 402-880-01	Excavation/Soil Disturbance Permit
LPR 404-00-00	Environmental Protection: Managing Waste; Air Quality; Ecological and Cultural Resources; Waste Minimization and Pollution Prevention; and Surface and Groundwater
LIR 404-00-02	General Waste Management Requirements
LIG 404-00-03	Waste Profile Form Guidance
NPDES	Permit Number NM0028355
NPDES	Storm Water Multi-Sector General Permit for Industrial Activity, 60 FR 50804
NPDES	General Permits for Storm Water Discharges from Construction Activities in Region 6, 63 FR 36490
Clean Water Act (CWA)	Title 33 U.S.C. 1251 et seq., as amended
New Mexico Water Quality Act	NMSA 1978, as amended
Federal Facility Compliance Act	Title 42 U.S.C. 69393e
HSWA & RCRA Permits	under 40 CFR, Subchapter I, Parts 264 and 270.
33 CFR	Parts 320–323 and 330.
40 CFR	Parts, 110, 112, 122–126, 302 and 355
Standards for Interstate and Intrastate Streams	20NMAC6.1
Ground and Surface Water Protection	20NMAC6.2
Liquid Waste Disposal	20NMAC7.3
NM Solid Waste Act	20NMAC9.1
DOE O 5400.1	General Environmental Protection Programs
DOE O 5820.2A	Protection of the Public and the Environment Radioactive Waste Management
NMWQCC	TA-50 RLWTF Groundwater Discharge Plan (DP-1132) TA-46 SWS Groundwater Discharge Plan (DP-857)
(CWA) Applicable 404 – Nationwide Permits	
Applicable Septic Tank Permits	

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9.0 ATTACHMENTS

Attachment 1	the generation and discharge or disposal of water and wastewater
Attachment 2	a process change or rerouting of a wastewater stream. a process or treatment change at a wastewater treatment facility. the connection/disconnection or modification to the wastewater collection systems, including internal building piping
Attachment 3	the installation or modification of a septic tank or holding tank system
Attachment 4	the installation of a new aboveground or vaulted oil storage tank
Attachment 5	a storm water discharge or storm runoff from a facility or activity any activity that would affect the quantity, quality, direction and destination, or the current manner in which storm water runs off a site
Attachment 6	the construction and/or demolition or decommissioning of a facility or structure the excavation and/or disturbance of soil or the filling of an area, including a watercourse
Attachment 7:	Recommended Major Implementation Criteria for Self-Assessment

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Generation and Discharge or Disposal of Water and Wastewater

(Attachment 1)

Existing Wastewater Discharges

All existing outfalls and drainpipes from Laboratory facilities that discharge or could potentially discharge industrial or sanitary wastewater to the environment must be permitted under the Laboratory's NPDES individual permit. All permitted wastewater discharges must meet the conditions of the NPDES individual permit.

All existing NPDES outfalls are categorized as follows.

- Outfall 001 Power plant discharge, including treated sanitary effluent used for cooling water.
- Category 02A Neutralized-demineralizer-regeneration brine and boiler blowdown
- Category 03A Cooling tower blowdown, evaporative coolers, chillers, condensers, and air washer blowdown, including treated sanitary effluent used for cooling water
- Category 05A High-explosive waste discharges
- Outfall 051 Radioactive-liquid-wastewater-treatment plant discharge
- Outfall 13S Treated sanitary sewage effluents.

Any existing discharge of an industrial or sanitary wastewater that is not identified in the Laboratory's NPDES permit application or permit must be reported immediately to ESH-18.

New Wastewater Discharges

New wastewater discharges must not be discharged to the environment until the discharge is reviewed and permit application is submitted, approved, and certified by the Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED). For some discharges, a Notice of Intent (NOI) to discharge may be an alternative. NMED will review the NOI and approve the discharge or require that the discharge be included in the NPDES permit or the required Groundwater Discharge Plan. ESH-18 must be contacted for all new wastewater discharges.

A lead-time of approximately 30 days is required for a routine notification to the EPA and NMED. If a permit modification is required, the wastewater discharge is considered a new discharge, and the lead-time from ESH-18 notification to EPA approval is approximately 210 days.

Water Discharges

All water discharges must be covered under a permit, NOI, or administrative agreement prior to discharge. This includes the following sources.

- Potable water
- Fire-Suppression-System Tests/Flushing
- Steam Condensate
- Fire Hydrant Flushing
- Water Line Disinfection and Flushing

ESH-18 must be contacted for all water discharges.

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Waste Stream Modifications

(Process/Treatment/Rerouting/Plumbing)

(Attachment 2)

Waste Acceptance Criteria and Waste Profile Forms

All wastewater discharged to the Sanitary Wastewater System (SWS) Plant, the Radioactive Liquid Waste Treatment Facility (RLWTF) and the High-Explosive Wastewater Treatment Facility (HEWTF) must meet the waste acceptance criteria (WAC) for these facilities. All wastewater discharges must meet the requirements of any new WAC as they are developed and approved.

Waste generators must complete a waste profile form (WPF) for each waste stream generated and disposed of at the RLWTF, the HEWTF, pumped and trucked to the SWS Plant, and disposed of at other facilities, as required. LIR 404-00-02 requires that a WPF be completed and approved by FWO-SWO. Laboratory Implementation Guidance (LIG) 404-00-03 provides guidance on the completion of a WPF, and WM-002R2, LANL Waste Acceptance Criteria, provides additional information. Click here (http://em.lanl.gov/Downloads/SWWS_FACT_SHEET.pdf, http://em.lanl.gov/Downloads/RLW_WAC_Factsheet.pdf) for examples of how the NPDES Outfall Permit might be compromised from lack of waste generator training and discharging into the SWS Plant and RLWTF collection system without an approved WPF.

Process/Rerouting/Treatment

No new or modified waste streams may be discharged to existing treatment facilities or through existing NPDES outfalls until they have met existing WAC; the modification has been reviewed by ESH-18; and, if applicable, EPA and NMED have been notified and have approved the modification.

Whenever a waste generator anticipates a change in its wastewater discharges, ESH-18 must be notified.

Piping and Plumbing Modifications

No new or modified piping or plumbing system that changes the ultimate discharge of a waste stream is allowed. No new or modified waste streams may be discharged to existing treatment facilities or through existing NPDES outfalls until they have met existing WAC; the modification has been reviewed by ESH-18; and, if applicable, EPA and NMED have been notified and have approved the modification.

ESH-18 must be notified if a piping or plumbing modification will affect the ultimate discharge of a waste stream.

A lead-time of approximately 30 days is required for a routine notification to the EPA and NMED. If a permit modification is required, the new or changed waste stream must be considered a new discharge. The lead-time from ESH-18 notification to EPA approval is approximately 210 days.

Notice of Intent to Discharge

An NOI for the alteration of the character or location of an existing wastewater discharge must be made to the NMED. The NMED will review the NOI, then (1) approve the discharge, or (2) require that the discharge be included in the NPDES permit or the required Groundwater Discharge Plan. No new or modified wastewater discharge is allowed until approval is received from the NMED.

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Nonradioactive Industrial Wastewater

Cooling Water and Blowdowns. All new, existing, or modified discharges of treated cooling water and boiler and compressor blowdowns are required to be permitted under the NPDES individual permit. Discharges of these waste streams into sanitary treatment facilities may be reviewed on a case-by-case basis to determine if they are compatible with biological treatment.

High-Explosive Wastewater. All new, existing, or modified discharges of high-explosive (HE) wastewater must be permitted under the NPDES individual permit. Discharge of similar types of HE wastewater may be combined.

Radioactive Industrial Wastewater

All radioactively contaminated and potentially contaminated waste streams must be discharged into a RLWTF (the TA-21 Treatment Plant or the TA-50 Treatment Plant).

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Septic Tanks and/or Holding Tank Systems

(Attachment 3)

Septic Tanks and Holding Tanks Systems

New or modified septic tanks and holding tank systems must be reviewed by ESH-18 and permitted under the New Mexico Liquid Waste Disposal Regulations before construction begins. A lead-time of 45 days should be anticipated for preparation of the permit application and approval by the NMED. In addition, any proposed changes in conditions from those stated in the permit and the regulations must be reviewed by ESH-18 and may require written notification to the NMED prior to implementation of the changes.

Septic tanks and holding tank systems are permitted to receive only sanitary-type liquid waste. This means gray water or black water that may contain without limitation human excreta and water-carried waste from typical residential plumbing fixtures and activities, including but not limited to wastes from toilets, sinks, showers, baths, clothes- and dish-washing machines, and floor drains. Specifically excluded from the definition of liquid waste are commercial process wastewater, roof drainage, or wastes, and wastes containing high concentrations of stabilizing or deodorizing agents.

Drainage from sinks and dishwashers used to wash nonradioactivity-contaminated dishes may be discharged to a septic tank or holding tank system if no chemicals are disposed of down the drain and if the sinks and dishwashers are used for rinsing and washing only.

Drainage from floor drains to wash nonradioactivity-contaminated areas may be discharged to a septic tank or holding tank system if no chemicals are disposed of down the drains.

All sanitary wastewater from the septic tank or holding tank system must be pumped and hauled to a sanitary treatment facility and covered under an approved WPF. No industrial liquid waste may be discharged into a septic tank system or sanitary holding tank without an approved WPF.

LIR 404-00-02 requires that a WPF be completed and approved by FWO-SWO. LIG 404-00-03 provides information on the completion of a WPF and WM-002R2, LANL Waste Acceptance Criteria, provides additional information.

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Installation or Modification of Aboveground Storage Tanks

(Attachment 4)

Aboveground Oil Storage Tanks

All new and existing aboveground oil storage tanks (AST) including vaulted tanks greater than 660 gallons are required to have a SPCC plan developed and implemented prior to a tank being placed into operation. If the AST supports experimental equipment, e.g., a MARX tank, it is advised that the experimental equipment be included in the SPCC Plan and spill control provided. ESH-18 will provide guidance on the development of a SPCC Plan. Additionally, LIR 250-02-02, "Facility-Tenant Agreements," requires that property is protected and co-tenant impacts are considered and mitigated along with environmental, health and safety concerns.

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Storm Water Discharges

(Attachment 5)

Storm Water Discharges from Facility Operations

An NPDES Storm Water Permit is required for storm water discharges from facilities that EPA categorizes as “Industrial Activity.” All activities at such facility operations must be reviewed and compared with EPA’s listing of “Industrial Activity.” All storm water discharges that are included in EPA’s “Industrial Activity” list must be either permitted or the activities terminated.

The types of activities within the definition of "Industrial Activity" that have been identified at the Laboratory are:

- Hazardous waste treatment storage and disposal facilities—this category also includes Solid Waste Management Units (SWMUs).
- Landfills and land application sites
- Asphalt-paving- and roofing-material manufacture activities
- Steam electric power generation facilities
- Scrap- and waste-recycling facilities
- Motor freight transportation facilities (vehicle maintenance)
- Fabricated metal facilities
- Primary metals facilities

ESH-18 will assist with interpreting which activities are regulated, making the necessary notifications, and with preparing the necessary NPDES Storm Water permit applications.

Storm Water Discharges from Soil-Disturbing Activities

All projects, regardless of size, must utilize the appropriate best management practices (BMPs) to control the discharge or migration of pollutants including sediment into a watercourse. EPA regulations require a permit and a SWPPP, which describe measures to reduce soil erosion and prevent runoff of pollutants and sediments. For projects with soil-disturbing activities over 5 acres of land, see Attachment 6.

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Soil-Disturbing/Excavating/Filling Activities

(Attachment 6)

Soil-Disturbing/Excavation Activities/Construction/Demolition or Decommissioning

Due to the nature of this work, an Excavation Permit, LIR 402-880-01 "Excavation/Soil Disturbance Permit," and/or ESH-ID review may need to be completed. During this process, ESH-18 will evaluate the proposed work for any surface water- and/or groundwater-protection requirements.

Soil-Disturbing Activities Greater Than Five Acres

For projects that disturb more than 5 acres of soil, a NPDES Storm Water permit is required. A separate permit is required for each project that disturbs an area greater than 5 acres of soil. In addition, all conditions of the permit and controls described in the SWPPP must be in place prior to the start of the soil-disturbing activity.

EPA's Construction General Permits defines a larger, common plan of development or sale as "a contiguous area where multiple separate and distinct construction activities are occurring under one plan." The plan is broadly defined as any announcement or piece of documentation or physical demarcation indicating construction activities may occur on a specific plot. Any land-disturbing activity occurring as part of a larger common plan of development (5 acres or greater) must obtain permit coverage until all intended construction has been completed.

For example: A developer plans to clear and grade a ten-acre site for a new subdivision of single family homes. The developer and his contractor obtain permit coverage for their activities. After clearing and grading the site, the developer sells twenty lots of a half-acre each to individual homebuilders. Because he is no longer responsible for the site (i.e., he has sold all of his interest in the site) the developer can terminate his coverage. The new operator of each acre site must then obtain permit coverage, regardless of the fact that the new operator will not disturb an area greater than five acres. This requirement remains in effect regardless of any lapse in time between the initial grading or clearing and the actual construction of the home.

ESH-18 will assist in interpreting which activities are regulated, developing the SWPPP, and in preparing the permit applications.

Soil-Disturbing Activities Less Than Five Acres

For all soil-disturbing activities less than 5 acres, appropriate BMPs must be provided to control the migration of sediment and other contaminants into surface water either directly or indirectly. These projects do not require a separate NPDES Storm Water permit or the preparation of a SWPPP, but they do require physical BMPs. ESH-18 is available to assist in the selection of the appropriate BMPs.

ESH-18 is available to assist in the determination of appropriate BMPs.

Work within a Watercourse and Dredge and Fill Permits

A Section 404 Dredge and Fill Permit from the Army Corps of Engineers and a New Mexico Section 401 Water Quality Certification are required for any project, regardless of size, that crosses or disturbs a watercourse. The permit and certification must be obtained prior to working in a watercourse. Appropriate BMPs must be implemented. Ordinarily, this will include a prohibition of work in a watercourse when it is flowing.

ESH-18 will assist in interpreting which activities are regulated and in preparing the permit applications.

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GUIDANCE

(Attachment 7)

Recommended Major Implementation Criteria for Self- Assessment

(Nonmandatory)

LIR Title	LIR Number
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The major implementation criteria listed below are to help Laboratory organizations assess their implementation of this LIR. These criteria provide an objective basis for self-assessing implementation of the major requirements contained in this LIR. The LIR also states requirements in other areas, such as scope, precautions, and responsibilities that when applied complement the successful implementation of these major requirements.

- 1. The most important criterion for assessing the implementation status of this LIR should answer the following question. Have the requirements contained in the LIR been communicated to the individual(s) responsible for performing the work?**
- 2. The recommended major implementation criteria for self-assessment of the LIR are the following.**
 - Discharges of water and/or wastewater are identified and properly permitted.
 - Changes in processes or rerouting of waste streams are reviewed and properly permitted.
 - Plumbing/piping modifications for wastewater streams are reviewed and properly permitted.
 - Septic tank or holding tank systems are properly permitted and operated.
 - Vaulted and aboveground oil storage tanks are addressed in a SPCC Plan.
 - Storm water discharges are evaluated and properly permitted.
 - Construction/D&D projects are screened for water quality concerns and properly permitted.
 - Activities in or near a watercourse are reviewed for water quality impacts and are properly addressed.
 - A screening of surface water- and groundwater-quality requirements is being conducted and the controls for any identified requirements are being addressed in an AHA and/or HCP.